

# Clamshell/Grapple Capacities

Boom No. B10:290

45,400 lb Crane Counterweight

0 lb Carbody Counterweight

Crawler Machine on a Barge

0 Degree thru 1 Degree and

1 Degree thru 3 Degree Static Machine List

No Travel - 360 Degree Rating

## MLC90A-1 SERIES 1



**LIFTING CAPACITIES:** Capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Weight of bucket is considered part of load. Where no capacity is shown, operation is not intended or approved.

Clamshell/grapple capacities shown are intended for limited duration applications. Continuous operation at these capacities may reduce component life.

**OPERATING CONDITIONS:** Machine to operate on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging No. 80121887, Wire Rope Specifications chart No. 9751-B, and Counterweight Arrangements chart No. 9745-A. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

**WIND CONDITIONS:** Machine may be operated in winds up to 35 mph provided crane operator judgment is used to allow for wind effect on lifted load and other considerations noted on capacity chart are followed. Wind speed to be measured at boom point elevation. **Operation is not permitted when wind is above 35 mph.** Park crane with bucket on ground or secured and position boom at 50 degrees. Lower boom onto blocking at ground level when wind is above 50 mph.



**OPERATING RADIUS:** Operating radius is horizontal distance from axis of rotation at barge deck to center of gravity of freely suspended load.



**BOOM ANGLE:** Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

**MACHINE EQUIPMENT:** Machine equipped with 21 ft 3 in. crawlers, 35 in. treads, 14 ft 5 in. gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 45,400 lb crane counterweight, and 0 lb carbody counterweight.

### Raising Ability Over End or Side of Crawlers

Boom Length (ft)	Machine List	
	0°	1° - 3°
	Bucket Weight (lb)	
62.3 - 91.9	8,500	8,500
101.7	8,500	4,800
111.5 - 121.4	4,800	4,800
Bucket weight includes the weight of all blocks, hooks, bucket, weight ball, slings and hoist lines beneath boom point sheaves.		

## Explanation of Symbols



Boom No. B10:290



Crane Counterweight  
+  
Carbody Counterweight



360 Degree Rating



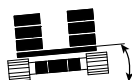
Boom Length



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)

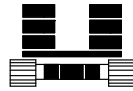
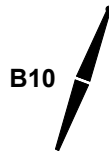


Machine List



Lifting Capacities  
(see page 1)

# MLC90A-1 S-1



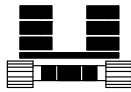
45,400 lb  
+  
0 lb



62.3 ft			
ft	°	0° - 1° lb	1° - 3° lb
32	64.7	22,000	21,200
34	62.6	21,700	19,800
36	60.5	20,500	18,600
38	58.3	19,300	17,500
40	56.1	18,300	16,500
42	53.9	17,400	15,600
44	51.5	16,600	14,700
46	49.1	15,800	14,000
48	46.6	15,100	13,300
50	44.0	14,400	12,700
52	41.2	13,800	12,100
54	38.3	13,300	11,500
56	35.2	12,800	11,000
58	31.8	12,300	10,600

72.2 ft			
ft	°	0° - 1° lb	1° - 3° lb
36	64.8	20,500	18,600
38	63.1	19,300	17,500
40	61.3	18,300	16,500
42	59.4	17,400	15,600
44	57.6	16,600	14,700
46	55.6	15,800	14,000
48	53.7	15,100	13,300
50	51.7	14,400	12,700
52	49.6	13,900	12,100
54	47.5	13,300	11,600
56	45.2	12,800	11,100
58	42.9	12,300	10,600
60	40.5	11,900	10,100
62	38.0	11,400	9,700
64	35.3	11,000	9,400
66	32.4	10,400	9,000

B10



45,400 lb  
+  
0 lb

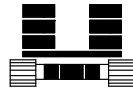
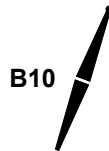


360°

82.0 ft			
ft	o	lb	lb
40	65.0	18,300	16,400
42	63.4	17,400	15,500
44	61.9	16,500	14,700
46	60.2	15,800	13,900
48	58.6	15,100	13,200
50	57.0	14,400	12,600
52	55.3	13,800	12,000
54	53.5	13,300	11,500
56	51.8	12,800	11,000
58	49.9	12,300	10,500
60	48.1	11,800	10,100
62	46.2	11,400	9,700
64	44.2	11,000	9,300
66	42.1	10,700	8,900
68	39.9	10,000	8,600
70	37.7	9,300	8,300
72	35.3	8,700	8,000
74	32.8	8,100	7,700
76	30.1	7,500	7,200



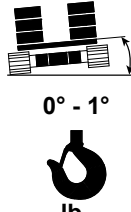
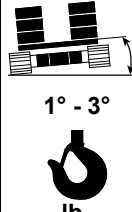
91.9 ft			
ft	o	lb	lb
46	63.7	15,800	13,900
48	62.3	15,100	13,200
50	60.9	14,400	12,600
52	59.4	13,800	12,000
54	58.0	13,300	11,500
56	56.5	12,800	11,000
58	55.0	12,300	10,500
60	53.4	11,800	10,100
62	51.8	11,400	9,700
64	50.2	11,000	9,300
66	48.6	10,700	8,900
68	46.9	10,300	8,600
70	45.1	9,700	8,300
72	43.3	9,100	8,000
74	41.4	8,500	7,700
76	39.5	7,900	7,400
78	37.5	7,400	7,000
80	35.3	6,900	6,500
82	33.1	6,400	6,100
84	30.7	5,900	5,600



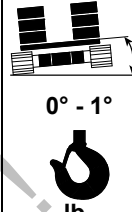
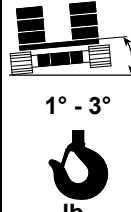
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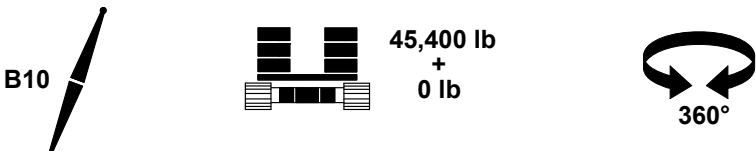
45,400 lb  
+  
0 lb




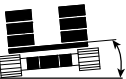

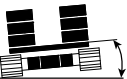



101.7 ft			
			
ft	o	lb	lb
50	63.9	14,400	12,500
52	62.7	13,800	11,900
54	61.4	13,200	11,300
56	60.1	12,700	10,800
58	58.8	12,200	10,400
60	57.4	11,800	9,900
62	56.1	11,400	9,500
64	54.7	11,000	9,100
66	53.3	10,600	8,800
68	51.9	10,100	8,400
70	50.4	9,500	8,100
72	48.9	8,800	7,800
74	47.4	8,200	7,500
76	45.9	7,700	7,100
78	44.3	7,200	6,600
80	42.6	6,700	6,200
82	40.9	6,200	5,700
84	39.1	5,700	5,300
86	37.3	5,300	4,900
88	35.4	4,900	

111.5 ft			
			
ft	o	lb	lb
54	64.1	13,200	11,200
56	63.0	12,600	10,700
58	61.8	12,200	10,200
60	60.6	11,700	9,800
62	59.4	11,300	9,400
64	58.2	10,900	9,000
66	57.0	10,500	8,700
68	55.8	9,900	8,300
70	54.5	9,300	8,000
72	53.2	8,600	7,700
74	51.9	8,000	7,300
76	50.6	7,500	6,800
78	49.3	7,000	6,300
80	47.9	6,500	5,900
82	46.5	6,000	5,400
84	45.0	5,500	5,000
86	43.6	5,100	

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<div><div>121.4 ft</div></div>			
 <div>ft</div>	 <div>o</div>	<div> 0° - 1°  lb</div>	<div> 1° - 3°  lb</div>
58	64.3	12,200	10,200
60	63.2	11,700	9,800
62	62.2	11,300	9,400
64	61.1	10,900	9,000
66	60.0	10,500	8,600
68	58.9	10,100	8,300
70	57.8	9,400	8,000
72	56.7	8,800	7,600
74	55.5	8,200	7,100
76	54.4	7,600	6,600
78	53.2	7,100	6,100
80	52.0	6,600	5,600
82	50.8	6,100	5,100
84	49.5	5,700	
86	48.3	5,200	
88	47.0	4,800	

REFERENCE ONLY!